

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A power consumption monitoring apparatus, comprising:
~~at least one~~ one or more electrical measurement device, ~~each device adapted to generate for~~
~~generating~~ a signal indicative of the electrical power passing through an electrical power line at the
location of the measurement device;

~~at least one~~ one or more data-controller controllers, each adapted to receive ~~the~~ a signal from
~~the~~ an associated electrical measurement device and to convert the signal into a data transmission
stream conveying at least one power consumption statistic, ~~the~~ each data controller including a
transmitter for transmitting the data transmission stream across a communications medium; and

a remote display controller including a receiver for automatically receiving a plurality of said
data transmission streams ~~the stream~~ from the communications medium, the display controller being
adapted to convert the power consumption statistics stream into one or more data display
transmission signals, and including an interface compatible with and suitable for providing the data
display transmission signals to a television display for reception by a variety of display devices to
thereby display power consumption statistics,

wherein the or each electrical measurement device includes power interruption means for
interrupting electrical power passing through the electrical power line; the each data controller is
adapted to send on and off signals to the or each electrical measurement device to control the
passage of electricity through the electrical power line; and

the interface is compatible with, and adapter for, also communicating the data display
transmission signals to a set top box.

2. (Currently Amended) The apparatus of claim 1, wherein the or each electrical
measurement device is adapted to replace a main fuse in a mains network.

3. (Currently Amended) The apparatus of claim 1, wherein the or each electrical
measurement device is adapted for either, insertion into, or attachment to, a mains fuse box.

4. (Currently Amended) The apparatus of claim 1, wherein the or each electrical
measurement device is adapted for insertion into a mains outlet socket.

5. (Currently Amended) The apparatus of claim 1, wherein the or each electrical
measurement device includes an outlet socket adapted to receive a power consuming device.

6. (Currently Amended) The apparatus of claim 4, wherein the or each data controller is integrated with the electrical measurement device.

7. (Currently Amended) The apparatus of claim 1 ~~or claim 6~~, wherein the or each electrical measurement device and data controller are adapted to communicate using any one of mains signalling, wireless communication protocols or hard-wired network communications.

8. (Currently Amended) The apparatus of claim 7, wherein the or each electrical measurement device includes a transceiver for communicating signals to the data controller.

9. (Currently Amended) The apparatus of claim 1, wherein the or each data controller further includes a receiver for receiving signals from the electrical measurement means.

10-11 (Cancelled).

12. (Currently Amended) The apparatus of claim 1 ~~or claim 11~~, wherein the or each data controller is adapted to automatically re-start time electrical measurement device if the data controller suffers a power failure.

13. (Currently Amended) The apparatus of claim 1, wherein the or each data controller and display controller are adapted to communicate using any one of ~~the mains signaling~~ signalling, wireless communication protocols or hard-wired network communications.

14. (Currently Amended) The apparatus of claim 1, wherein the or each display controller includes a signal decoder to perform the conversion of the data transmission stream into the one or more data display transmission signals.

15-16 (Cancelled)

17. (Currently Amended) The apparatus of claim ~~1~~ 45, wherein the interface is a UHF standard co-axial connector suitable for connection to a UHF input socket on ~~the a~~ a television.

18. (Currently Amended) The apparatus of claim ~~1~~ 45, wherein the interface is a SCART standard interface suitable for connection to a SCART input socket on ~~the a~~ a television or set-top box.

19. (Currently Amended) The apparatus of claim 1, wherein the or each display controller further includes storage means adapted to record one or more power consumption statistics to form a set of historical power consumption data.

20. (Currently Amended) The apparatus of claim 19, wherein the or each display controller is adapted to generate one or more data display transmission signals which include historical power consumption data

21. (Currently Amended) The apparatus of claim 19, wherein the or each display controller includes a processor to calculate power usage statistics based on historical power consumption data.

22. (Cancelled)

23. (Currently Amended) A method of monitoring power consumption, comprising the steps of:

generating in each of at least one or more electrical measurement devices ~~device~~, a signal indicative of the electrical power passing through an electrical power line at the location of the electrical measurement device;

receiving ~~the a~~ signal from ~~the an~~ associated electrical measurement device at each of one or more data controllers ~~a data controller~~ and converting the signal into a data transmission stream conveying at least one power consumption statistic;

transmitting the one or more data transmission streams ~~stream~~ across a communications medium; and

automatically receiving the one or more transmission streams ~~stream~~ from the communications medium by a receiver in a display controller; ~~and~~

converting the power consumption statistics ~~stream~~ into one or more different data display transmission signals ~~for reception by a variety of display devices to display power consumption statistics, and~~

providing one or more data display transmission signals via an interface compatible with and suitable for providing the one or more data display transmission signals to a television display to thereby display the at least one power consumption statistic, and to a set box, the method further comprising the step of controlling the power interruption means in the or each electrical measurement device for interrupting electrical power passing through the electrical power line by sending on and off signals to the or each electrical measurement device from the or each data controller.

24. (Currently Amended) The method of claim 23, further comprising the step of communicating the signal from the or each electrical measurement device to the or each data controller using one of mains ~~signaling~~ signalling, wireless communication protocols or hard-wired network communications.

25. (Currently Amended) The method of claim 23, further comprising the step of communicating the data transmission stream from the or each data controller to the display controller using one of mains signalling, wireless communication protocols or hard-wired network communications.

26. (Currently Amended) The method of claim 23, further comprising the step of supplying electrical power through an outlet socket of ~~time~~ the or each electrical measurement device for an attached power consuming device.

27. (Original) The method of claim 23, further comprising the step of recording the power consumption statistics in a storage means to form a set of historical power consumption data.

28. (Original) The method of claim 23 or claim 27, further comprising the step of generating one or more data display transmission signals which include historical power consumption data.

29. (Original) The method of claim 23 or claim 27, further comprising the step of processing the historical power consumption data to calculate power usage statistics.

30. (Currently Amended) The method of claim 23, wherein the or each data controller automatically sends a re-start signal to the electrical measurement device in response to the data controller suffering a power failure.

31-32 (Cancelled).

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